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(54) INTEGRATED CIRCUIT DEVICE

(57) Abstract:

PURPOSE: To relax the limits to the integration density and to the number of signal pins of a single LSI only when the LSI chip is mounted on an integrated directly package and to relax the influence of a noise caused at the LSI chip and at leads.

CONSTITUTION: A plurality of LSI chips 5 are mounted at the upper part and the lower part so as to sandwich a support plate 9 or a support plate 9 which can be grounded. In such an integrated circuit structure, the LSI chips at the upper part and the lower part are connected to leads or a lead frame 1 by means of bonding wires 2. When the two chips at the upper part and the lower part are die-bonded, they are connected to the leads or the lead frame 1. The leads have a structure which is divided into the upper part and the lower part or into the right and the left so as to sandwich the support plate 9 which can be grounded: they are connected to the individual chips. Thereby, the chips can be integrated highly and mounted at high density, and their noise can be reduced.

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